

## **AMENDMENTS TO THE CLAIMS**

**1. (Currently Amended)** A plasma display device, comprising: including a plasma display panel in which a plurality of discharge cells are arranged, and in which a phosphor layer in a color corresponding to each discharge cell is disposed, and the phosphor layer emits being operable to emit light by being excited by ultraviolet light, wherein the phosphor layer has a green phosphor layer including  $Zn_2SiO_4:Mn$ [[;]] and the a green phosphor made of  $Zn_2SiO_4:Mn$ , the green phosphor having an even density extending from a surface to an inside of the green phosphor, has and the green phosphor having an element ratio of zinc (Zn) to silicon (Si) of 2/1, which is a stoichiometric ratio, at a portion which includes a proximity of [[a]] the surface thereof of the green phosphor.

**2. (Currently Amended)** A plasma display device, comprising: including a plasma display panel in which a plurality of discharge cells are arranged, and in which a phosphor layer in a color corresponding to each discharge cell is disposed, and the phosphor layer emits being operable to emit light by being excited by ultraviolet light, wherein the phosphor layer has a green phosphor layer including  $Zn_2SiO_4:Mn$ ; and the a green phosphor made of  $Zn_2SiO_4:Mn$ , the green phosphor having an even density extending from a surface to an inside of the green phosphor, has and the green phosphor having an element ratio of zinc (Zn) to silicon (Si) equal to a stoichiometric ratio at a portion which includes a proximity of [[a]] the surface thereof of the green phosphor, and wherein the green phosphor is positively charged or zero-charged.

**3. (Currently Amended)** A method of producing a phosphor for a plasma display device, comprising:

a process in which one of metal salt, nitrate salt, and organometallic salt, including elements [Zn, Si, Mn] composing zinc, silicon and manganese elements which comprise a green phosphor, are blended so that an element ratio of Zn to Si is to be 2/1, and then the salt and water

are mixed to produce mixed liquid;

a pre-firing process in which, after the mixed liquid is dried, the mixed liquid is fired in an air at 600°C to 900°C, to produce pre-fired matter; and

a firing process in which the pre-fired matter is fired in an atmosphere including at least one of N<sub>2</sub>, N<sub>2</sub>-O<sub>2</sub>, and Ar-O<sub>2</sub>, between 0.105 MPa and 150MPa inclusive, at 1,000°C to 1,350°C.

**4. (Currently Amended)** A method of producing a phosphor for a plasma display device, comprising:

a process of mixing a raw material for a phosphor, in which a raw material of oxide and/or carbonate including ~~elements [Zn, Si, Mn] composing zinc, silicon and manganese elements which comprise~~ a green phosphor, are mixed;

a pre-firing process in which the mixed raw material is fired in an air at 600°C to 900°C, to produce pre-fired matter; and

a firing process in which the pre-fired matter is fired in an atmosphere including at least one of N<sub>2</sub>, N<sub>2</sub>-O<sub>2</sub>, and Ar-O<sub>2</sub>, between 0.105 MPa and 150MPa inclusive, at 1,000°C to 1,350°C.